The most commonly used arrest and self-defence actions arsenal by different officers of internal services

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Abstract

Background & Study Aim:	Different officers of internal services have to use psychological and/or physical force, special means and even weapons. Throughout the year, officers have a limited number of hours given for specific professional compe- tence development. We are making assumption that our research will provide information about the real sit- uations of coercion and violence usage by different officers. The aim of this study is a recommendation, to use this knowledge to create optimal conditions for participants officer qualification courses, provide additional experience for them, and help to improve the quality of their work, and increasing public confidence.			
Material & Methods:	The study involves all Lithuanian Departments of Internal Affairs officers: Police at lowest level (males) 186 persons and the State Border Guard Service (SBGS) 120 persons. The research was conducted in three directions: the offenders behaviour that officers encounter during the detention, the distribution of actions performed by the officers in fights with the offenders, self-defence training themes requested by the officers.			
Results:	Police officers carry out offenders detentions approximately two times more often than SBGS officers d Police officers more often face with the passively resisting offenders, whereas SBGS officers more often me an aggressive resistance. Both police and SBGS officers perform approximately 1/3 of defend and 2/3 of a tack actions while arresting the offender. Police officers tend to use less arrest and wrestling actions. Police o ficers wish to devote more time to defend actions in the training, whereas SBGS officers – to attack actions			
Conclusions:	A more frequent participation in the detention of offenders is accompanied by the need of officers to devel- op their defensive combat skills. Different officers have different needs of practical combat training, therefore, the different practical training programs should be prepared for them.			
Key words:	attacks actions \cdot defend actions defend \cdot training of police officers \cdot State Border Guard Service			
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Authors' Contribution:

- A Study Design
- B Data Collection
- C Statistical AnalysisD Manuscript Preparation
- E Funds Collection

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The offenders behaviour potential threat – possible but not yet actual threat, capable of being or becoming but not yet in existence, latent.

The offenders behaviour danger – real, obvious action that may cause injury, pain, etc.

Arrest action – a seizure or forcible restraint, an exercise of the power to deprive a person of his or her liberty, the taking or keeping of a person in custody by legal authority, in response to a criminal charge.

Combat self-defence actions – physical confrontation between two or more combatants.

Defend actions – the act of defending yourself or someone or something from attack.

Attack actions – act violently against (someone or something), to try to hurt, injure, or destroy (something or someone).

INTRODUCTION

The profession of the officer of state internal services is exceptional. State appoints the officers to carry out the maintenance of law and order. In assessing the professional competence and professional activity of the officers, the theoretical and practical preparation is the most important [1-4]. Theoretical and practical preparation involves many factors, including combat skills too. In the processes of law enforcement, officers usually do a sedentary (in the cabinets or cars) job, however, they may encounter and confront the offenders disobeying officers legitimate claims/ requirements at any moment [5].

In those moments, officers have to use psychological and/or physical force, special means and even weapons. In recent period, a trend of increasing violence against the officers carrying out their duties in the European countries has been observed. This has the influence on the growth of officers' traumas rate [6]. Meanwhile, officers are more inclined to resort to violence (instead of counteracting it in the typical way of brave people) in the case of a physical assault on a person whose relations with the respondents (officers) and the degree of violence of the assault have not been determined [7].

In the European countries, researches of the cases of encounters between officers and offenders have been carried out, and special combat training programs for the officers are also being prepared [8]. In conflict situations, i.e. in a direct encounter with the offenders, officers usually have to use physical force and combat self-defence actions [9]. A weapon is used most often in cases where officers run out of physical strength and arsenal of combat actions [10]. In such cases, there is a threat of violence outbreak which may result in illegal actions of officers and cause dangerous consequences [11]. Such situations discredit not only the law enforcement agencies but also the state itself.

Mostly officers confront with cases where offenders are actively trying to avoid detention or attack the officers by using dangerous actions [5]. The most frequent script of offenders arrest actions is set (leg kicks, hands punches; arrest actions; catching of the offender over a short distance; truncheons; usage of gas and electroshock; putting of the handcuffs on, and convoy) [12]. Often, in different departments of internal services (Police, State Border Guard Service, the Office of the Prosecutor, etc. the unified combat training programs are used in vocational training [13-16]. In course of improving existing and creating new training and professional development programs for officers of internal services, the problems of different combat actions, special means, use of weapons, training topics, and distribution of hours arise. Throughout the year, officers have a limited number of hours given for specific professional competence development [6]. In order to maximize the effectiveness of training courses, it is necessary to optimize them [17], by reasonably distributing the time for the different themes in the qualification courses. For this purpose, it is necessary to clarify the different officers' characteristics of the use of force and compare them.

We are making assumption that our research will provide information about the real situations of coercion and violence usage by different officers. This will create conditions for the justification of officers' qualification courses, provide additional experience for them, and help to improve the quality of their work as well as increase public trust. The aim of this study is a recommendation, to use this knowledge to create optimal conditions for participants officer qualification courses, provide additional experience for them, and help to improve the quality of their work, and increasing public confidence.

MATERIAL AND METHODS

The research was conducted during the training courses of Lithuanian statutory internal services officers, in 2014. The study involved all the Lithuanian Police officers at lowest level (males) 186 persons and the State Border Guard Service (SBGS) 120 persons. Subjects were selected randomly. The age of Police officers investigated was 38.02±10.58 years, length of service: 13.18±26.5 years, the age of SBGS 40.34±9.87 years, length of service 14.43±4.73 years.

The study was approved by the Local Ethical Committee. The modified questionnaire of officers activity's research was submitted by Štarevičius and Veršinskas [16]. A total overview of the characteristics is presented in Tables 1, 2, and 3 in the Results section. All the data were collected anonymously. Significance of the data distribution differences was checked by calculating according to the formula χ -square (χ^2). The four field (2×2) frequency table calculation method was applied; for the determination of reliability of the data elicited from the separate sample indicators, p<0.05 criteria was applied.

RESULTS

In assessing the probability of encountering with the offenders and carrying out their detention in

No	The offend	ers behaviour, during detention	Police Officers	SBGS Officers	Action difference χ^2 and reliability values
1.	Potential threat	Obey the requirements (n (%))	180 (26)	60 (25)	0.049
2.		Passively not obey the requirements (n (%))	178 (26)	30 (13)	44.432 (p<0.05)
3.		Actively resist (ran out, restricted the motion, etc.) (n (%))	120 (17)	50 (21)	1.603
4.		Unarmed, aggressively attacked (n (%))	100 (14)	98 (41)	100.100 (p<0.05)
5.		Armed, aggressively attacked (n (%))	116 (17)	0	73.900 (p<0.05)
б.	-	Total (n (%))	514 (74)	178 (75)	0.049
7.	Total clashes (n (%))		694 (100)	238 (100)	

Table 1. Offenders behaviours apply the Police and SBGS officers

the services of Police and SBGS, it was found that Police officers find themselves in situations of offenders detention approximately two times more often than SBGS officers do. One Police officer within 38 years of service have been involved in at an average of 3.73 of the offenders detentions, while SBGS officer within 40 years of service participated only in 1.98 of the detentions.

In assessing offenders detentions (Table 1), it was found that the ratio between dangerous situations and situations that could turn into dangerous at work of both services officers is similar. In both services approximately 3/4 of the detentions pose a real risk to the officers health and lives, and 1/4 of them may become dangerous. It was found that Police officers more often face with the passively resisting (failure to comply with the legitimate claims/requirements of officers) offenders (x²=44.432; p<0.05). SBGS officers more often meet an aggressive resistance (attacking by dangerous to health and life combat actions) (χ^2 =100.100; p<0.05), but the probability to meet an armed resistance is very low for the SBGS officers in comparison with the Police officers (χ^2 =730.900; p < 0.05).

Police officers also more frequently (p<0.05) face an armed resistance. In assessing the actions that officers are attacked by and carried out by themselves in the process of offenders detention (Table 2), it was found that the officers of both services during the detention of the offender perform approximately 1/3 of the defend actions and 2/3 of the attack actions. Offenders resisting the detention try to strike with their hands and legs in different directions. The distribution between hands' and legs' striking actions made by offenders evading arrest is similar in cases of detention of both services. In assessing the distribution of attack actions carried out in offenders detention, the main differences between the SBGS and Police officers were identified.

Police officers in a process of arresting the offender use less arrest and wrestling actions, seek to overcome the offender to be arrested by using hand punches and leg kicks, assist for other officers (p<0.05), and use the special means (such as truncheon, tear-gas, and electroshock) or even a gun more often instead. In assessing the preferences for curriculum content (Table 3) by officers of both services, the main differences were identified. Police officers wanted to spend more time on defend actions in training, whereas SBGS officers – on attack actions (χ^2 =57.074; p<0.05). In the training of defend actions Police officers wanted to devote more time to their defence against a knife attack, attempt to take away their service weapons, and a gun attack, whereas SBGS officers - to defence against strokes. In the training of attack actions Police officers wanted to devote more time to the use of truncheons and arrest actions, whereas SBGS officers - to arrest actions, throwing, pain and strangulation actions.

DISCUSSION

This study has demonstrated that different officers confronting offenders are usually placed in potentially dangerous situations in which the passively, actively, or aggressively resisting offender or a group of offenders have to be arrested. In comparison of the experience of offenders detention and characteristics of the applicable actions in those situations between the Police and SBGS officers, a greater degree of danger is found in the work of Police officers, as they have to deal with offenders detention as well as face with an armed resistance more often than SBGS officers. The nature of offenders resistance and officers applicable actions also differ. An increased risk at work causes an increased risk for stress-related disorders such as Post-Traumatic Stress Disorder for officers. Traumatic

	Actions groups		Activity's Police Officers	Actions SBGS Officers		Action difference χ^2
No						and reliability values
			Top the head (n (%))	55 (3)	0	18.963 (p<0.05)
			Bottom the head (n (%))	39 (2)	0	13.383 (p<0.05)
1.		Defend against leg kick	Side of the head (n (%))	44 (3)	17 (6)	6.139 (p<0.05)
		legiller	Straight the torso (n (%))	81 (5)	13 (4)	0.243
	tions		Total (n (%))	219 (14)	30 (10)	2.918
) Defend actions		Bottom the crotch (n (%))	52 (3)	15 (5)	2.204
	Defer		Straight the tummy (n (%))	74 (5)	17 (6)	0.657
2.		Defend against hand punch	Side of the torso (n (%))	52 (3)	0	17.912 (p<0.05)
		nunu punch	Side of the head (n (%))	44 (3)	0	15.121 (p<0.05)
			Total (n (%))	222 (14)	32 (11)	2.111
8.	-	Defend against h	eader (n (%))	27 (2)	10 (3)	3.208
			From the front took the hand (n (%))	179 (11)	61 (21)	17.920 (p<0.05)
1.		Arrest actions	From the back took the hand (n (%))	100 (6)	29 (10)	4.527 (p<0.05)
			Total (n (%))	279 (18)	90 (31)	24.572 (p<0.05)
	-	Wrestling actions	Strangling (n (%))	76 (5)	20 (7)	1.948
_			Keeping (n (%))	65 (4)	15 (5)	0.599
5.			Break out lock (n (%))	39 (2)	11 (4)	1.454
			Total (n (%))	180 (11)	46 (16)	4.135 (p<0.05)
	S	Striking	Hand punch (n (%))	74 (5)	0	25.659 (p<0.05)
ó.	Attack actions		Leg kicks (n (%))	57 (4)	0	19.664 (p<0.05)
			Total (n (%))	131 (8)	0	46.221 (p<0.05)
		Special actions	Personal checking (n (%))	150 (9)	33 (11)	0.878
7.			Handcuffs used (n (%))	169 (11)	29 (10)	0.156
			Baton used (n (%))	74 (5)	0	25.659 (p<0.05)
			Tear gas used (n (%))	89 (6)	0	31.001 (p<0.05)
			Electroshock used (n (%))	33 (2)	0	11.304 (p<0.05)
			Assist for other officer (n (%))	7 (0)	23 (8)	56.641 (p<0.05)
			Use handgun (n (%))	5 (0)	0	0.699
			Total (n (%))	527 (33)	85 (29)	2.057
3.	Total defend actions (n (%))			468 (29)	72 (25)	2.020
9.	Total attack actions (n (%))			1117 (71)	221 (75)	— 3.039
10.	Actions (units' total (n (%))		1585 (100)	293 (100)	

Table 2. Distribution of actions performed by Police and SBGS officers fights with offenders

experiences may result in the changes of brain structure and functions associated with attention and cognitive control processes [18].

A wider officers' experience of dangerous situations proportionally reduces the cognitive as well as selfcontrol; psychological distress linked with work when officers were exposed to high psychological demands, low decision latitude, and job strain [19] increase the likelihood of violence. This consistent pattern is also reflected by the long-term mental and behavioural changes in Police officers [7], as the processes of social changes in society run in parallel with changes in behaviour of officers. Environment has an influence on individuals' behaviour [20], thus, in the research of links between offenders resistance actions and officers coercive actions the deeper and broader investigations are necessary, which may help to develop

No	Self-de	fence themes	Police Officers	SBGS Officers	Action difference χ² and reliability values	
1.		Defend against striking (n (%))	117 (10)	104 (16)	13.087 (p<0.05)	
2.	tions	Defend against knife (n (%))	148 (13)	0	139.334 (p<0.05)	
3.	Defend actions	Defend against take away the gun (n (%))	137 (12)	47 (7)	10.137 (p<0.05)	
4.	Defei	Defend against gun (n (%))	121 (11)	0	112.741 (p<0.05)	
5.		Defend against embrace and strangling (n (%))	102 (9)	81 (13)	5.950 (p<0.05)	
б.		Arrest actions (n (%))	133 (12)	108 (17)	9.245 (p<0.05)	
7.		Handcuffs used and checking (n (%))	104 (9)	55 (9)	0.143	
8.	Attack actions	Baton used (n (%))	159 (14)	0	150.331 (p<0.05)	
9. 10. 11.		Pain and strangle actions (n (%))	87 (8)	57 (9)	0,881	
10.		Throwing (n (%))	37 (3)	66 (10)	35.644 (p<0.05)	
11.		Striking techniques (n (%))	0	62 (10)	130.821 (p<0.05)	
12.		Assist for officer that has attacked (n (%))	0	38 (6)	79.204 (p<0.05)	
13.		Keeping (n (%))	0	25 (4)	51.769 (p<0.05)	
14.	Total defend actions (n (%))		625 (55)	232 (36)	— 57.074 (p<0.05)	
15.	. Total attack actions (n (%))		520 (45)	411 (64)		
16.	Total actions (n (%))		1145 (100)	643 (100)		

 Table 3. Self-defence themes which are requested the Police and SBGS officers for training

the programming patterns of officers and offenders' behaviour in extreme situations [21].

According to the data of our research, this trend is reflected by the peculiarities of different officers' situations of offenders detentions, performed actions, and applicable special means. Even though the training programs of both services officers are similar, the different officers use the different actions in extreme situations. Also, different officers request for skills development programmes of different content. Police officers encountering offenders and applying attack actions, special means as well as weapons more frequently want to improve their defend actions. In evaluation of the study of SBGS officers, the trends observed are opposite. A paradoxical principle has been observed - a great outbreak of violence from offenders stimulates the officers to improve their defend actions, whereas a weak offenders resistance stimulates the officers to improve their attack actions. Eventually, the use of violence has a negative impact on the psyche of the officers [22]. Special training help to reduce the effect of negative psychological experience on the behaviour of officers and to differentiate their actions in the face of a different nature offenders [10, 23]. In the training of different officers, it is necessary to analyse the practical nature of a future work, examine the probabilities,

develop their scripts, and apply situational games during which the appropriate situational solutions could be found [24, 25].

Recent research results imply that training should be sufficiently specific in order to simulate the eventual performance environment [26, 27], not only physically, technically, and physically, but also mentally. Trained personnel make better conflict resolution decisions which improve organizational safety and mitigate potential liabilities [28]. Thus, practical training not only teaches to execute the task but also to execute it under the new conditions of increased selfconsciousness [29]. The training of different officers require different programs, especially in the practical training. In order to make teaching effective, it is necessary to expand the study to gain the insights of students adaptation for new conditions.

The studies of the phenomenon of intervention officers of internal services were initiated at the end of the last century [30]. Further results of the researches – presented among others in this publication – demonstrate the need for an interdisciplinary approach. On the one hand, because every intervention falls under the category of extreme actions [31] and preparation to deal with such situations requires the ability to overcome stress and appropriate motor skills, including self-defence. On the other hand, the professional preparation of the human for optimum functioning in such situations causes that training must be based on the already well-established knowledge (e.g. psychology, sociology, physiology, kinesiology), but also on the unique knowledge like *agonology* what means science about struggle [32, 33]. Very important support is the emergence in the global space science the new sub-discipline *science of martial arts* [34, 35].

This new knowledge is just making evident among others, that for example in publications concerning biomechanical aspects of taekwondo (martial art is very useful in certain categories of intervention) dominate the empirical data about ways of attacking (89% of information) and only 11% of motor activities of defence [36]. For coaches responsible for developing training plans for officers of internal services very useful can be a knowledge about training measures applied by outstanding judo coaches [37], about the adaptation effects of men and women training various combat sports [38-40] or comprehensively preparing for intervention modern pentathlon [41].

CONCLUSIONS

The principle diagnosed in the study: a more frequent participation in offenders detentions and an encounter with a stronger offenders resistance is accompanied by the officers' need to develop their defend combat abilities, whereas a weaker offenders resistance is accompanied by the officers' need to develop their attack combat skills. The study revealed the different practical combat training needs of different internal affairs services officers. The specific practical training programs in which officers and offenders' behavioural programming is applied should be prepared for the training of officers of different attribution services.

COMPETING INTEREST

The authors declare that they have no competing interests.

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